

persons are prevented from seeing at least one authorized person." This feature is new and is not disclosed in the prior art.

The question therefore is whether this feature and its combination in claim 1 can be properly rejected under 35USC103.

Palmer teaches away from the present invention in that Palmer sets forth in the final sentence of this section the following "Once a riot is started it could be quickly controlled for a long enough period to bring in adequate force without inflicting injury upon the occupants of the areas so treated". It is clear therefore that Palmer is teaching that the riot merely be controlled for a period of time by the fogging system so that the disoriented persons do not harm themselves or others in the riot area, **but only for a period sufficient to bring in "adequate force"**. It is well established that control of crowds or riots is effected by "adequate" or overwhelming force so that the persons concerned quickly realize that resistance is useless. Palmer is therefore suggesting that the persons within the riot area be maintained in their disoriented state until enough backup or additional force is assembled so that the persons within the riot area will be overcome by the assembled adequate or overwhelming force.

There is simply no suggestion in Palmer that the assembled persons would enter the area while the fog is in place. The teaching is therefore that the persons within the area are held disoriented until the overwhelming force can be revealed to them thus causing their surrender based upon the overwhelming force.

MPEP at paragraph 2141.02 states that a prior art reference must be considered as a whole "including portions that would lead away from the claimed invention." That is clearly the situation here where Palmer "leads away".

Zhang teaches that infra red imaging systems can be used in smoke and dust created by fires. In column 1, lines 28 to 30 it is stated that "infra red is much less subject to scattering and absorption by smoke or dust". In column 1, line 59 it is stated that "fire creates smoke and dust".

It is submitted therefore that the Examiner's characterization of the teaching of Zhang is incorrect. The Examiner sets forth at the bottom of page 2 "that Zhang discloses a thermal imaging system that allows authorized persons within an area filled with a fogging material (smoke for example)..." Zhang does not disclose the use of the infra red imaging system in a "fogging material" but merely discloses its use in "smoke and dust" caused by fire. There is simply no evidence that thermal imaging systems have the same effect in the fogging material with which the present invention is concerned as it does in "smoke and dust".

One requirement of a prima facie case under 35 U.S.C. 103 (as set forth in paragraph 2143 of MPEP) is that "finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." It is submitted that the combination of Palmer and Zhang does not disclose the feature set forth in Claim 1 of "causing said at least one authorized person to subdue the unruly persons while viewing the images of the unruly persons and while the unruly persons are prevented from seeing said at least one authorized person."

Zhang makes no disclosure whatsoever of persons being prevented from seeing authorized persons. There is clearly a significant difference between a person looking to be rescued and a person looking to flee or to inflict damage on the authorized person. While a person looking to be rescued may not be able to see across a room and thus find the escape route, the person will welcome the authorized person with open arms so that if he comes within a few feet and can be seen, he will be welcomed. If a person looking to flee cannot see across a room but can see a few feet, he may be limited in his ability to inflict damage on the authorized person but not necessarily prevented from doing so. This limitation on the ability to see must be sufficient therefore to incapacitate the unruly person. Zhang makes no disclosure of this feature. Zhang makes no disclosure whatsoever of subduing unruly persons while viewing images of those unruly persons.

Palmer teaches away from the invention in that Palmer discloses assembling an overwhelming force. Yet further Palmer makes no disclosure whatsoever that authorized

persons would enter the area while the fog is in place to subdue the unruly persons. Palmer makes no disclosure that authorized persons would view images of the unruly persons. Palmer makes no disclosure that the authorized persons would subdue the unruly persons while the unruly persons are prevented from seeing the authorized person.

It is clear therefore that neither Palmer nor Zhang disclose the above features separately and therefore this feature is simply not disclosed by the combination of Zhang and Palmer.

Yet further a requirement for a prima facie case under paragraph 2143 of MPEP is that "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

The Examiner's combination is based upon the premise that there is some motivation to combine the teachings of Zhang and Palmer. It is clear that there is no motivation in the documents themselves since these documents are directed to entirely separate and distinct fields. Palmer is concerned with riot control by fogging and assembling adequate force. Zhang is concerned with rescue of entrapped persons in a fire. There is simply no suggestion nor any basis for the required motivation within the references themselves to combine these references.

The Examiner will therefore presumably rely upon motivation "in the knowledge generally available to one of ordinary skill in the art".

In this regard the Examiner has included the following paragraphs:

"The Examiner also notes that it is well known and considered desirable in riot situations to provide authorized persons with equipment (gas masks, for example) that reduces or prevents the authorized persons from being impaired by fogging materials designed to interfere with the visual sense of unruly persons within the area."

Up until now riot control in confined areas has been carried out by use of pepper spray, water cannons and other projectiles such as rubber bullets, bean bags and the like. CS gas or tear gas are not used in confined areas as they are severely dangerous in such situations. It is understood that the Examiner is referring in the above paragraph to the use of "pepper spray". Pepper spray acts to incapacitate persons by interfering with their breathing and by causing mucous membranes to generate moisture. This system is therefore an incapacitation system wherein the subject is incapacitated and suppressed. Similarly water cannons and other projectiles cause a similar effect in that the subject is incapacitated and brought to the ground.

The Examiner's statement is therefore incorrect in that pepper spray is not a "fogging material". Also pepper spray is not "designed to interfere with the visual sense of unruly persons" pepper spray instead incapacitates the subject. While the user of pepper spray may use breathing equipment (gas masks), this is certainly not necessary and most uses occur without the user wearing such equipment.

Pepper spray has a number of major drawbacks which render it highly unsuitable for riot control except in extreme conditions, so that it becomes a technique of last resort. Pepper spray is noxious, toxic and dangerous to the subject. Pepper spray can leave some persons able to physically resist so that force remains necessary in many circumstances. It is still necessary therefore to provide a large number of persons sufficient to overcome any remaining resistance or force from the persons concerned. The pepper spray can cause injury and even death to the subjects. Pepper spray leaves a significant remaining contamination which can last for many days and render the area useless during that time..

To the contrary the present invention provides an arrangement in which the subjects are incapable of providing a resisting force since they have no knowledge of the location or whereabouts of the authorized persons. As the authorized persons can readily see

the subjects to be arrested, the authorized persons can move to the required location and orientation relative to the subject to obtain the desired result without the use of any force.

The fogging material of the present invention has no toxic effects and acts by disorienting the subject due to the inability to see. There are no injurious effects and no contamination.

The statement by the Examiner is therefore incorrect in that the prior art arrangements to which the examiner refers merely relate to systems which incapacitate the subjects by force or noxious substances whereupon authorized persons in sufficient numbers enter the area to arrest the subjects while they remain partly or wholly incapacitated by the effects of the materials applied. The only equipment involved in such activities is the occasional use of gas masks to prevent the effect of the noxious substances.

With regard to the question of the "level of ordinary skill in the art", it is submitted that the art concerned is that of control of persons in a confined location such as a jail or the like. Such persons have available to them conventional equipment and weapons primarily using force. It is assumed that the person concerned would have access to the teaching of Palmer. Such persons would have access to the conventional weapons of batons, handcuffs, pepper spray, water cannon, guns, projectile launchers. Such persons would have access to gas masks for pepper spray, bearing in mind that the use of pepper spray in confined areas can lead to contamination requiring use of such gas masks. Such persons would not be involved in fighting fires nor in the high tech equipment used for rescue in fires. It is submitted that the person skilled in this art when studying Palmer would follow the teaching set forth of assembling the required overwhelming force and entering to overwhelm the unruly persons after the fogging material is dispersed. The gas masks are of no value since they merely further disadvantage the authorized person in the fogging material, except if the pepper spray were used in the use of the overwhelming force.

In simple terms, the existence of gas masks does not provide the motivation to combine the teachings of Palmer and Zhang.

Yet further MPEP at paragraph 2143.01 states unequivocally that "The level of skill cannot be relied upon to provide the suggestion to combine references". (Al-Site Corp v VSI International Inc)

It is submitted therefore that there is no motivation available to the Examiner to establish a prima facie case under 35USC103.

Yet further, the following points are raised.

1. Zhang refers to smoke and dust. There is absolutely no indication in the prior art that infrared imaging systems can be used successfully with the fogging materials with which the present invention is concerned. There is no motivation therefore to utilize products used in smoke and dust in the arrangement of the present invention which uses the "fogging material" set forth.
2. Palmer teaches away from the present invention in that Palmer suggests merely the assembly of adequate force. There is absolutely no suggestion in Palmer that a technique should be used to overcome the visual impairment.
3. It should be noted that the disclosure in Palmer is merely one minor element described in 15 lines of a lengthy document primarily concerned with fogs for agricultural and fire fighting purposes. This not a technique which had ever actually been applied in the art concerned of suppressing unruly persons and is merely a paper speculation.
4. The Examiner refers to the use in the prior art of gas masks. There is no indication that gas masks would have any advantage in the present invention or in any improve the abilities of the authorized persons in the fogging materials.
5. The conventional techniques for subduing the subjects in a situation of this type involves non-lethal weapons which partly or wholly incapacitate the subjects. Such weapons include rubber bullets and other non-lethal projectiles, water cannon, stun

guns and pepper sprays. Pepper spray is in effect merely another non-lethal weapon since it is in most cases directional.

6. The present invention has significant advantages in that there is no harm, injury or stress to the subjects (unruly persons) nor to the authorized persons. The subjects due to their inability to see do not know the presence or location of the authorized persons and therefore cannot make any attempts to attack them. The authorized persons can see the subject sufficiently well that they can subdue the subject by grasping the subject in a manner which allows the subject to be hand-cuffed without significant risk of injury.

7. The amount of restriction to the vision of the unruly persons is not merely that the unruly person cannot see the authorized person across the room but the fogging material is itself a known product and has characteristics well beyond that of mere steam to reduce the visual ability of the subjects. The unruly person must be incapacitated by his inability to see the authorized person at all until handcuffed. Also, the amount of ability of the authorized person to see the unruly persons is much more than merely being able to identify their location. If the restriction to vision of the unruly person is insufficient and the enhancement to the vision of the authorized person is insufficient, then there will simply be a hand to hand struggle once both are aware of the other's presence. The prior art of Zhang which merely indicates that infrared systems can be used to see through smoke and dust simply provides no teaching that it is possible to use infrared imaging systems to reduce the effects of the fogging materials sufficiently to allow the authorized persons to properly subdue the unruly persons. This is not merely a matter of the authorized persons knowing the location of the unruly persons but requires the ability of the authorized persons to see the unruly persons sufficiently that they can make an arrest of that person before that person perceives the presence of the

authorized person and is encouraged to resist. Both Zhang and Palmer are silent on this issue which is the core of the claimed invention.

It is submitted therefore that the present invention provides significant advantages which are not apparent from the prior art and is not obvious from a proper combination of the prior art of Zhang and Palmer cited by the Examiner under 35USC103.

A letter is attached from the Office of Law Enforcement Technology Commercialization which indicates that the novel system proposed by the applicant is an effective tool for use in law enforcement and corrections.

It is requested therefore that the rejection of the 35USC103 be withdrawn. In the absence of withdrawal of this objection, the Examiner is advised that an appeal will be filed since it is respectfully submitted that the Examiner has not established a prima facie case as set force in paragraph 2143 of MPEP.

Respectfully submitted

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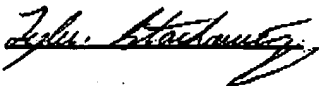
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